Amendments to the Claims

- 1. (Currently amended) A resin obtained by polymerizing a starting material monomer, wherein the monomer incorporates a hydrophilic spacer, and wherein a ligand is optionally immobilized on the resin.
 - 2. (Original) The resin of claim 1, wherein the monomer is a (meth)acrylic monomer.
- 3. (Currently amended) The resin of elaim 1 or 2, claim 1, wherein the hydrophilic spacer has at least one partial structure represented by any one formula selected from the group consisting of the following formulas (Ia) to (Ie)[[.]]:

wherein with respect to (Ia),

 A_1 is -O- or -NH-, A_2 is a single bond or a lower alkylene group, A_3 is an appropriate joining group,

each of X_1 to X_3 , whether identical or not, is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R₁ to R₇, whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms, -CH₂OH or a hydroxyl group,

m is an integer of 0 to 2, m' is an integer of 0 to 10, m" is an integer of 0 to 2,

when a plurality of R_3 to R_7 units exist, they may be identical or not, and when a plurality of X_3 units exist, they may be identical or not;

wherein with respect to (Ib),

A₁ is -O- or -NH-, A₄ is a lower alkylene group, and

each of n and n', whether identical or not, is an integer of 1 to 10;

wherein with respect to (Ic),

A₁ is -O- or -NH-, A₄ is a lower alkylene group, and each of p, p' and p", whether identical or not, is an integer of 1 to 10;

$$-A_{1}-A_{2}$$

$$\begin{bmatrix}
OH \\
X_{4} \\
C \\
R_{8}
\end{bmatrix}$$

$$\begin{bmatrix}
R_{9} \\
C \\
R_{10}
\end{bmatrix}$$

$$(Id)$$

wherein with respect to (Id),

A₁ is -O- or -NH-, A₂ is a single bond or a lower alkylene group,

 X_4 is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R₈ to R₁₀, whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms,

-CH₂OH or a hydroxyl group,

q is an integer of 1 to 7,

when a plurality of R_8 units exist, they may be identical or not, and when a plurality of X_4 units exist, they may be identical or not;

$$-A_{1} \bigcirc \bigcirc \bigcirc \bigcirc \bigcap_{\mathbf{r}} \stackrel{\mathrm{H}}{\stackrel{\mathrm{N}}{\longrightarrow}}$$

wherein with respect to (Ie),

A₁ is -O- or -NH-, and

r is an integer of 1 to 10.

4. (Currently amended) The resin of claim 3, wherein the hydrophilic spacer has at least one partial structure represented by the following formula (Id)[[.]]:

$$-A_{1}-A_{2}$$

$$\begin{bmatrix}
OH \\
X_{4} \\
C \\
C \\
R_{8}
\end{bmatrix}$$

$$\begin{bmatrix}
R_{9} \\
C \\
R_{10}
\end{bmatrix}$$

$$(Id)$$

wherein in the formula (Id),

A₁ is -O- or -NH-, A₂ is a single bond or a lower alkylene group,

X₄ is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R_8 to $R_{10}[[7]]$, whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms,

-CH₂OH or a hydroxyl group,

q is an integer of 1 to 7,

when a plurality of R_8 units exist, they may be identical or not, and when a plurality of X_4 units exist, they may be identical or not.

- 5. (Original) The resin of claim 4, wherein in the formula (Id), A1 is -O-, A2 is a methylene group, X4 is a single bond, q is 4, the plurality of R8 units are identically hydrogen atoms, and R9 and R10 are hydrogen atoms.
- 6. (Currently amended) The resin of claim 1, wherein the hydrophilic spacer is a compound represented by the formula shown below[[.]]:

wherein Ya is a hydrogen atom or an amino-group-protecting group.

7. (Currently amended) The resin of claim 5, which comprises a copolymer of a compound represented by the formula shown below[[.]]:

wherein Ya is a hydrogen atom or an amino-group-protecting group.

8. (Currently amended) A compound represented by the formula shown below[[.]]:

$$H_3C$$
OH
OH
 N
 N
 N
 N

wherein Ya is a hydrogen atom or an amino-group-protecting group.

9. (Currently amended) The resin of claim 3, wherein the hydrophilic spacer has at least one partial structure represented by the following formula (Ie)[[.]]:

$$-A_1 \longrightarrow O \longleftrightarrow O \longrightarrow I$$
(Ie)

wherein in the formula (Ie),

A₁ is -O- or -NH-, and

r is an integer of 1 to 10.

10. (Original) The resin of claim 9, wherein in the formula (Ie), A₁ is -O-.

11. (Currently amended) The resin of claim 1, wherein the hydrophilic spacer is a compound represented by the formula shown below[[.]]:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

12. (Currently amended) The resin of claim 10, which comprises a copolymer of a compound represented by the formula shown below[[.]]:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

13. (Currently amended) A compound represented by the formula shown below[[.]]:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

- 14. (Original) The resin of claim 9, wherein in the formula (Ie), A₁ is -NH-.
- 15. (Currently amended) The resin of claim 1, wherein the hydrophilic spacer is a compound represented by the formula shown below[[.]]:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

16. (Currently amended) The resin of claim 14, which comprises a copolymer of a compound represented by the formula shown below[[.]]:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

17. (Currently amended) A compound represented by the formula shown below[[.]]:

$$H_3C$$
 $NH-YD$
 CH_2
 $NH-YD$

wherein Yb is a hydrogen atom or an amino-group-protecting group.

- 18. (Canceled).
- 19. (Canceled).
- 20. (Currently amended) A screening method for a target molecule, which interacts specifically that exhibits a specific interaction with a ligand, which method comprises at least the following steps:
- (i) a step for immobilizing a ligand to a resin obtained by polymerizing a starting material monomer, wherein the monomer incorporates a hydrophilic spacer, the resin of any one of claims 1 to 7, 9 to 12 and 14 to 16,
- (ii) a step for bringing a sample comprising or not comprising a target molecule into contacting with the ligand-immobilized resin obtained in (i) above, with a sample, which may or may not comprise the target molecule,
- (iii) a step for identifying and/or analyzing a molecule, which interacts specifically or does not interact specificallythat has exhibited or has not exhibited a specific interaction with the ligand, and
- (iv) a step for judging [[a]]the molecule that exhibits ainteracts specifically interaction with the ligand to be a target molecule on the basis of the analytical results obtained in (iii)

above.

- 21. (Currently amended) A method of measuring a target molecule, which interacts specifically that exhibits a specific interaction with a ligand in a sample, which method comprises at least the following steps:
- (i) a step for immobilizing a ligand to a resin obtained by polymerizing a starting material monomer, wherein the monomer incorporates a hydrophilic spacer, the resin of any one of claims 1 to 7, 9 to 12 and 14 to 16,
- (ii) a step for bringing a sample into contacting with the ligand-immobilized resin obtained in (i) above with a sample,
- (iii) a step for measuring and/or analyzing a molecule, which interacts specifically or does not interact specifically that has exhibited or has not exhibited a specific interaction with the ligand, and
- (iv) a step for measuring a target molecule, which interacts specifically that exhibits a specific interaction with the ligand on the basis of the analytical results obtained in (iii) above.
- 22. (New) The screening method of claim 20, wherein the monomer is a (meth)acrylic monomer.
- 23. (New) The screening method of claim 20, wherein the hydrophilic spacer has at least one partial structure represented by any one formula selected from the group consisting of the following formulas (Ia) to (Ie):

wherein with respect to (Ia),

 A_1 is -O- or -NH-, A_2 is a single bond or a lower alkylene group, A_3 is an appropriate joining group,

each of X_1 to X_3 , whether identical or not, is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms, each of R_1 to R_7 , whether identical or not, is a hydrogen atom, a linear or branched

alkyl group having 1 to 3 carbon atoms, -CH₂OH or a hydroxyl group,

m is an integer of 0 to 2, m' is an integer of 0 to 10, m" is an integer of 0 to 2, when a plurality of R_3 to R_7 units exist, they may be identical or not, and when a plurality of X_3 units exist, they may be identical or not;

wherein with respect to (Ib),

A₁ is -O- or -NH-, A₄ is a lower alkylene group, and each of n and n', whether identical or not, is an integer of 1 to 10;

wherein with respect to (Ic),

A₁ is -O- or -NH-, A₄ is a lower alkylene group, and each of p, p' and p", whether identical or not, is an integer of 1 to 10;

wherein with respect to (Id),

A₁ is -O- or -NH-, A₂ is a single bond or a lower alkylene group,

 X_4 is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R_8 to R_{10} , whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms,

-CH₂OH or a hydroxyl group,

q is an integer of 1 to 7,

when a plurality of R_8 units exist, they may be identical or not, and when a plurality of X_4 units exist, they may be identical or not;

$$-A_1 \longrightarrow O \longleftrightarrow O \longrightarrow I$$
(Ie)

wherein with respect to (Ie),

A₁ is -O- or -NH-, and

r is an integer of 1 to 10.

24. (New) The screening method of claim 23, wherein the hydrophilic spacer has at least one partial structure represented by the following formula (Id):

$$-A_{1}-A_{2}$$

$$\begin{bmatrix}
OH \\
X_{4} \\
C\end{bmatrix}
\\
C \\
R_{8}\end{bmatrix}$$

$$\begin{bmatrix}
R_{9} \\
C\end{bmatrix}$$

$$R_{10}$$

$$(Id)$$

wherein in the formula (Id),

A₁ is -O- or -NH-, A₂ is a single bond or a lower alkylene group,

 X_4 is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R_8 to R_{10} , whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms,

-CH₂OH or a hydroxyl group,

q is an integer of 1 to 7,

when a plurality of R_8 units exist, they may be identical or not, and when a plurality of X_4 units exist, they may be identical or not.

25. (New) The screening method of claim 24, wherein in the formula (Id), A1 is -O-, A2 is a methylene group, X4 is a single bond, q is 4, the plurality of R8 units are identically hydrogen atoms, and R9 and R10 are hydrogen atoms.

26. (New) The screening method of claim 20, wherein the hydrophilic spacer is a compound represented by the formula shown below:

$$HO$$
 OH
 OH
 OH
 N
 Ya

wherein Ya is a hydrogen atom or an amino-group-protecting group.

27. (New) The screening method of claim 25, which comprises a copolymer of a compound represented by the formula shown below:

wherein Ya is a hydrogen atom or an amino-group-protecting group.

28. (New) The screening method of claim 23, wherein the hydrophilic spacer has at least one partial structure represented by the following formula (Ie):

$$-A_1 \longrightarrow O \longleftrightarrow O \xrightarrow{H} (Ie)$$

wherein in the formula (Ie),

A₁ is -O- or -NH-, and

r is an integer of 1 to 10.

- 29. (New) The screening method of claim 28, wherein in the formula (Ie), A₁ is -O-.
- 30. (New) The screening method of claim 20, wherein the hydrophilic spacer is a compound represented by the formula shown below:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

31. (New) The screening method of claim 29, which comprises a copolymer of a compound represented by the formula shown below:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

- 32. (New) The screening method of claim 28, wherein in the formula (Ie), A₁ is -NH-.
- 33. (New) The screening method of claim 20, wherein the hydrophilic spacer is a compound represented by the formula shown below:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

34. (New) The screening method of claim 32, which comprises a copolymer of a compound represented by the formula shown below:

$$H_3C$$
 CH_2
 $NH-YD$

wherein Yb is a hydrogen atom or an amino-group-protecting group.

35. (New) The method of measuring of claim 21, wherein the monomer is a (meth)acrylic monomer.

36. (New) The method of measuring of claim 21, wherein the hydrophilic spacer has at least one partial structure represented by any one formula selected from the group consisting of the following formulas (Ia) to (Ie):

wherein with respect to (Ia),

 A_1 is -O- or -NH-, A_2 is a single bond or a lower alkylene group, A_3 is an appropriate joining group,

each of X_1 to X_3 , whether identical or not, is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R₁ to R₇, whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms, -CH₂OH or a hydroxyl group,

m is an integer of 0 to 2, m' is an integer of 0 to 10, m" is an integer of 0 to 2, when a plurality of R_3 to R_7 units exist, they may be identical or not, and when a plurality of X_3 units exist, they may be identical or not;

wherein with respect to (Ib),

 A_1 is -O- or -NH-, A_4 is a lower alkylene group, and each of n and n', whether identical or not, is an integer of 1 to 10;

wherein with respect to (Ic),

A₁ is -O- or -NH-, A₄ is a lower alkylene group, and each of p, p' and p", whether identical or not, is an integer of 1 to 10;

$$-A_{1}-A_{2}$$

$$\begin{bmatrix}
OH \\
X_{4} \\
X_{4}
\\
C \\
R_{8}
\end{bmatrix}$$

$$\begin{bmatrix}
R_{9} \\
C \\
R_{10}
\end{bmatrix}$$

$$(Id)$$

wherein with respect to (Id),

A₁ is -O- or -NH-, A₂ is a single bond or a lower alkylene group,

X₄ is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R_8 to R_{10} , whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms,

-CH₂OH or a hydroxyl group,

q is an integer of 1 to 7,

when a plurality of R_8 units exist, they may be identical or not, and when a plurality of X_4 units exist, they may be identical or not;

$$-A_1 \bigcirc \bigcirc \bigcirc \bigcirc \bigcap_{r} \stackrel{H}{\stackrel{N}{\longrightarrow}}$$

wherein with respect to (Ie),

 A_1 is -O- or -NH-, and

r is an integer of 1 to 10.

37. (New) The method of measuring of claim 36, wherein the hydrophilic spacer has at least one partial structure represented by the following formula (Id):

$$-A_{1}-A_{2}$$

$$\begin{bmatrix}
OH \\
X_{4} \\
C \\
C \\
R_{8}
\end{bmatrix}$$

$$\begin{bmatrix}
R_{9} \\
C \\
R_{10}
\end{bmatrix}$$

$$(Id)$$

wherein in the formula (Id),

A₁ is -O- or -NH-, A₂ is a single bond or a lower alkylene group,

X₄ is a single bond or a methylene group optionally substituted by a linear or branched alkyl group having 1 to 3 carbon atoms,

each of R_8 to R_{10} , whether identical or not, is a hydrogen atom, a linear or branched alkyl group having 1 to 3 carbon atoms,

-CH₂OH or a hydroxyl group,

q is an integer of 1 to 7,

when a plurality of R_8 units exist, they may be identical or not, and when a plurality of X_4 units exist, they may be identical or not.

- 38. (New) The method of measuring of claim 37, wherein in the formula (Id), A1 is -O-, A2 is a methylene group, X4 is a single bond, q is 4, the plurality of R8 units are identically hydrogen atoms, and R9 and R10 are hydrogen atoms.
- 39. (New) The method of measuring of claim 21, wherein the hydrophilic spacer is a compound represented by the formula shown below:

wherein Ya is a hydrogen atom or an amino-group-protecting group.

40. (New) The method of measuring of claim 38, which comprises a copolymer of a compound represented by the formula shown below:

wherein Ya is a hydrogen atom or an amino-group-protecting group.

41. (New) The method of measuring of claim 36, wherein the hydrophilic spacer has at least one partial structure represented by the following formula (Ie):

$$-A_1 \longrightarrow O \longleftrightarrow O \xrightarrow{H} (Ie)$$

wherein in the formula (Ie), A₁ is -O- or -NH-, and

r is an integer of 1 to 10.

- 42. (New) The method of measuring of claim 41, wherein in the formula (Ie), A_1 is O-.
- 43. (New) The method of measuring of claim 21, wherein the hydrophilic spacer is a compound represented by the formula shown below:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

44. (New) The method of measuring of claim 42, which comprises a copolymer of a compound represented by the formula shown below:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

45. (New) The method of measuring of claim 41, wherein in the formula (Ie), A_1 is - NH-.

46. (New) The method of measuring of claim 21, wherein the hydrophilic spacer is a compound represented by the formula shown below:

wherein Yb is a hydrogen atom or an amino-group-protecting group.

47. (New) The method of measuring of claim 45, which comprises a copolymer of a compound represented by the formula shown below:

$$H_3C$$
 $NH-YD$
 CH_2
 $NH-YD$

wherein Yb is a hydrogen atom or an amino-group-protecting group.